

HDT 8520



www.philips.com/support

For support call 0800 331 60 15

EN High-Definition Digital Terrestrial Recorder







PHILIPS

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1 Important

Thank you for purchasing a Philips product. Take time to read this user manual before using your HD recorder. It provides important information on the installation, operation and safety of your HD recorder. Keep this manual next to your HD recorder for future reference.

	<p>Disposal of your old product</p> <p>Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.</p> <p>When this “crossed-out wheeled bin” symbol is attached to a product or its packaging, it means that the product is covered by the European Directive 2002/96/EC.</p> <p>Please inform yourself about the local separate collection process for electrical and electronic products.</p> <p>Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.</p>
	<p>The “Material recyclability” symbol affixed on the package cardboard and user manual means that these parts are recyclable.</p> <p>So do not dispose of them with your normal household waste.</p>
	<p>The “Material recyclability” symbol affixed on plastic packaging parts means that these parts are recyclable.</p> <p>So do not dispose of them with your normal household waste.</p>
	<p>The “Green Dot” symbol affixed on the cardboard means that the manufacturer of the product has financially contributed to the “Avoidance and Recovery of Packaging Waste” organization.</p>

1.1 Safety information

Your HD recorder is powered using a 12V power supply unit. Your HD recorder has been manufactured to meet the appropriate safety standards, but you must follow the below instructions to operate it safely. Keep these instructions for future reference.

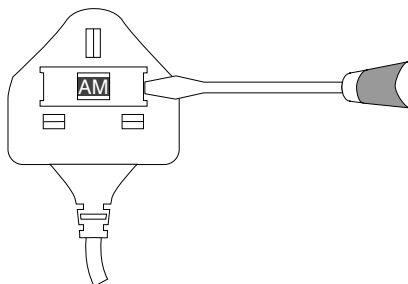
Danger

- Your HD recorder does not contain any user-serviceable parts. Do not attempt to open it. All maintenance work must be carried out by qualified service centres.
- The supplied mains plug is a non-rewireable type. If you need to replace the fuse, you must use an ASTA- or BSI-approved BS 1362 fuse, rated at 3 A and marked as shown below.

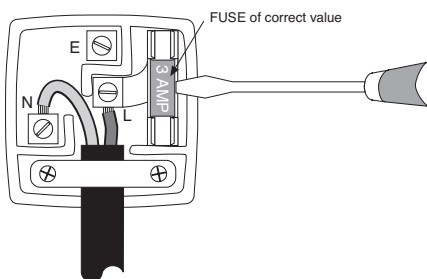


or

The plug has its fuse beneath a fuse cover on its face. Use a screwdriver to lever off the fuse cover, replace the fuse with a new one and refit its cover. **Never use a plug if its fuse cover is missing.**



The fuse is inside the rewirable plug. Use a screwdriver to remove the plug's back cover. **Never put the plug into the mains socket when its cover is removed.** Lever out the fuse and replace it with a new one. Replace the plug's back cover.



If the supplied mains plug is not suitable for your mains socket-outlet, DO NOT plug it in. Remove its fuse and then cut the plug off the lead. Destroy the severed plug immediately to avoid the shock hazard which would exist if this were to be plugged into a mains socket. Fit an appropriate mains plug on the lead. If this plug contains a fuse, it should be as described above. If you are using a non-fused plug, an external fuse must not exceed 5 A.

Warnings

- Before connecting the 12 V power supply unit to the mains, check that the mains supply voltage corresponds to the voltage printed on it. If the mains voltage is different, consult your local dealer.
- The 12 V power supply unit has been designed for indoor use only.
- Use only the original 12 V power supply unit.
- Unplug the 12 V power supply unit from the wall socket before lightning storms.
- Ensure that the 12 V power supply unit is easily accessible in case you need to shut down your HD recorder in an emergency.
- To prevent fire or shock hazard, do not expose your HD recorder to rain or moisture.
- Place your HD recorder on a firm surface, and do not cover the ventilation openings with items such as newspapers, table clothes, curtains, etc.
- Do not install your HD recorder near heat sources such as radiators, stoves or other equipment that produce heat. Protect it from direct sunlight.
- In order to ensure a free flow of air around your HD recorder, allow at least 5 cm of space above and around it. This prevents overheating of your HD recorder.
- Do not place any combustible objects such as candles, etc., on your HD recorder.
- Never stand objects filled with liquids, such as vases, on top of your HD recorder. Do not place anything on your HD recorder that might drip or spill into it. If this happens, disconnect the 12 V power supply unit from the wall socket and have your HD recorder checked at any authorized service centre.
- While the hard disk is running, do not move the product or turn off the power suddenly. The company shall not be liable for any corruption of data on the hard disk caused by the carelessness of or misuse by users.
- The batteries installed in the remote control should not be exposed to excessive heat such as sunshine, fire or the like.

Please also pay attention to all the warnings and cautions listed throughout this manual.

1.2 Reducing power consumption

Your HD recorder is designed to reduce its impact on the environment and complies with the European Directive 2009/125/EC. This is part of Philips' ongoing commitment to lead the way in environmental responsibility.

It has a standby mode of operation that needs very little power. See the table below and please note that:

- When your HD recorder is in the standby mode, you save energy (and therefore money) and reduce carbon dioxide emissions that damage the environment.
- You use the standby button on your HD recorder or remote control to switch between on and standby modes. In addition, if your HD recorder is on, but you do not press any button on it or your remote control for 3 hours (configurable - see 'Automatic eco mode' on page 30), your HD recorder will automatically get into the standby mode.
- If you are not going to use your HD recorder for several days, you can cut its energy consumption to zero by unplugging it from the mains wall socket.
- In the off and standby modes, your HD recorder cannot receive updates from the network. However, at recorder wake-up, you will be prompted by a message if an update notification has been received.

Mode	Front-panel standby indicator and display	Typical power consumption (W)	Typical annual energy use (kWh)
Power adaptor unplugged	Not lit up	0	0
Standby	Standby indicator is red	0.31 W	22.5 *
Active Standby	Standby indicator is orange	11.5 W	
On	A channel number is shown on the display	13.6 W	

* Based on your HD recorder being On for 4 hours daily and being in standby for 20 hours

2 Your HD recorder

Congratulations on your purchase and welcome to Philips!

To fully benefit from the support that Philips offers, register your product at www.philips.com/welcome.

With your HD recorder, you will never need to schedule your life around your favourite TV programmes. Thanks to the built in hard-disk drive (HDD) that records programmes as you watch them, you can pause live TV, or repeat a scene you missed.

Want to record a programme so that you can watch it later? Just press the record button. Once you begin to record, you are free to watch other recorded programmes. You can even watch the programme that you are recording from the start without disrupting the recording, or record two channels at the same time.

Need to schedule a recording in advance? Simply access the TV Guide, which lists the TV programme schedule for the next seven days. And you can do much more than just record on this recorder.

2.1 What's in the box?



HD recorder



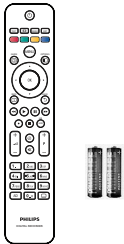
HDMI cable



RF cable



Mains lead



Remote control
and 2 x AAA
batteries



User manual



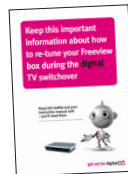
Quick start
guide



12V power
supply unit



Freeview flyer



Retune flyer

Caution

Plastic bags can be dangerous.

To avoid suffocation, keep the bag away from babies and children.

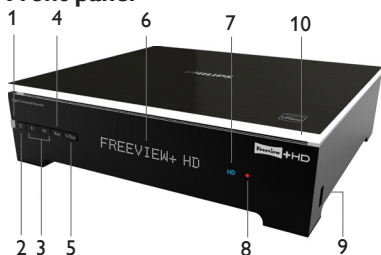
2.2 What you also need (not supplied)?



SCART cable
(required only if you have a
standard-definition TV)

2.3 Overview

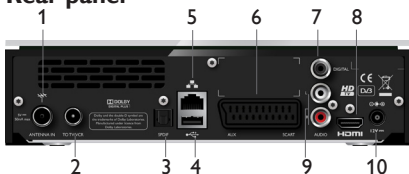
Front panel



Front Panel

- 1 Standby indicator
- 2 Standby button
- 3 Programme +/- buttons
- 4 Resolution button
- 5 V-Out button
- 6 Display
- 7 HD indicator
- 8 Record indicator
- 9 USB 2.0 connector
- 10 Top lighting

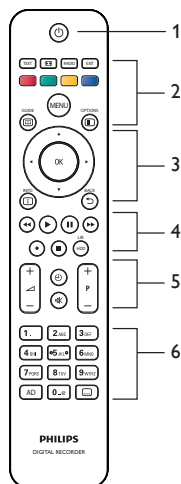
Rear panel



Rear Panel

- 1 Antenna IN*
- 2 Antenna output to TV/VCR (antenna signal)*
- 3 Optical S/PDIF audio out (digital)*
- 4 USB 2.0 connector*
- 5 RJ45 Ethernet connector*
- 6 AUX SCART connector*
- 7 DIGITAL audio out (digital)*
- 8 L/R audio out (analogue)*
- 9 HDMI™ connector*
- 10 12V power connector*

Remote control



* Safe extra low voltage

Remote control

- 1 Standby
- 2 Text, Picture format, Radio, Exit, TV guide, Menu, Options
- 3 Up/Down, Left/Right, OK, Info, Back
- 4 Recorder functions
- 5 Volume control, Mute, Programme +/-
- 6 Alphanumeric keypad, Audio description, Subtitles

2.4 How to read this manual?

Danger

Describes situations of injury or loss of life.

Warning

Describes actions that may cause damage to the product.

Caution

Describes actions that are required to avoid dangerous or illegal situations.

Note

Additional information.

Tip

Information that is useful to know but not essential to the task. For example, information about alternative use.

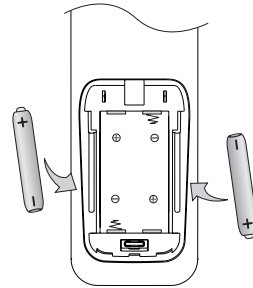
2.5 How to use the menus?

- 1 Press **MENU**, **GUIDE**, **OPTIONS** or **INFO** on your remote control to display the **Main** menu, **TV guide**, **Tools** menu or channel banner respectively.
- 2 Use **▲** / **▼** / **◀** / **▶** to navigate through the menus and change any setting.
- 3 Press **◀** or **OK** to confirm your choice.
- 4 Press **EXIT** to remove the menu.

For more information, see pages 14 to 33.

3 Getting started

3.1 Preparing your remote control



- 1 Remove the battery cover by gently pressing down in the small circle on the cover and sliding it downwards.
- 2 Insert the two AAA batteries as shown. Be sure to match the + and - marks on the batteries to their respective marks inside the battery compartment.
- 3 Replace the battery cover.

Note

For better reception, point your remote control directly at the front panel of your HD recorder while pressing any button.

Caution

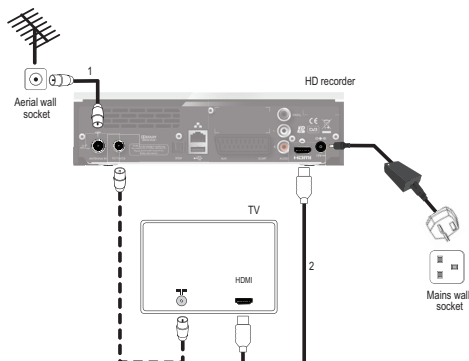
Do not leave batteries in your remote control for long periods of time without use. Replace both batteries at the same time. Do not dispose of used batteries with your domestic waste. Used batteries should be recycled at the end of their useful life. Do not dispose of batteries in a fire.

3.2 Connecting your HDTV

Danger

Risk of electric shock!

Before making any connections, ensure that your equipment is disconnected from the mains.



- 1 Connect the aerial cable (not supplied) from the aerial wall socket to the **Antenna IN** connector on the rear panel of your HD recorder.
- 2 Use the supplied HDMI cable to connect the **HDMI** connector on the rear panel of your HD recorder to the HDMI input connector of your TV. For the next step, note the chosen HDMI input of your TV (e.g. 'HDMI 1').
- 3 Connect your TV to the mains and select the correct A/V source on your TV. This should correspond to the HDMI input connector to which your HD recorder is connected. If necessary, refer to your TV's user manual for instructions.

Notes

- Optionally, you can also use the supplied RF cable to connect the RF output connector (labelled **To TV/VCR**) of your HD recorder to the RF input connector of your TV.
- To connect your HD recorder to your standard-definition TV, see page 34.

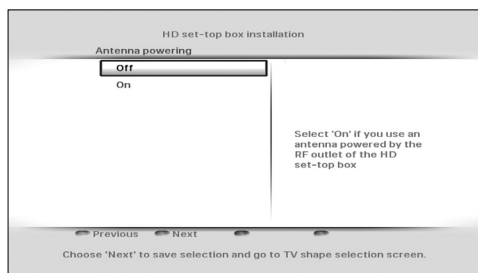
3.3 Installing your HD recorder


Before you start installation, make sure you have made all the required connections.

- 1 Insert the two-way connector on the supplied mains lead into the 12V power supply unit. Connect the 12V power supply unit to the 12V power connector on the rear panel of your HD recorder.
- 2 Connect the mains plug to the mains wall socket.
Your HD recorder displays a welcome message after a few seconds.

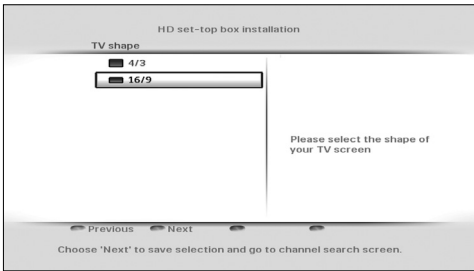


- 3 Press the **green** button to start the installation.
The **Antenna powering** menu appears.

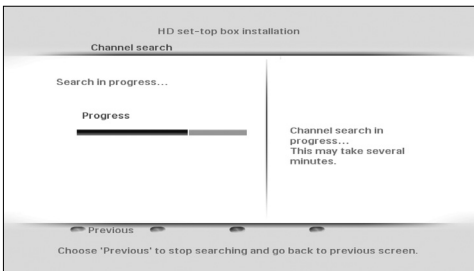


- 4 Let the **Antenna powering** setting be **Off** unless you use an indoor antenna that can be powered by the coaxial cable connected to the **Antenna IN** socket of your HD recorder (see note).
-  **Note**
Your HD recorder can only deliver 50 mA current under 5V, so refer to your indoor antenna's user manual to check if its power requirement fits the capability of your HD recorder.

Press the **green** button to confirm.
The **TV shape** menu appears.

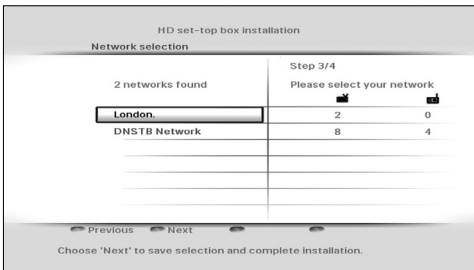


- 5** Let the **TV shape** setting be **16:9** if you use an HDMI connection to your TV. Press the **green** button to confirm and start scanning for the available channels.



Note

If you are in an area that receives signals from more than one network and possibly variant of the same channel (e.g. BBC1, BBC1 Scotland), then your HD recorder will prompt you to select the network and channel variant that you want in the **All TV** and **All Radio** lists.

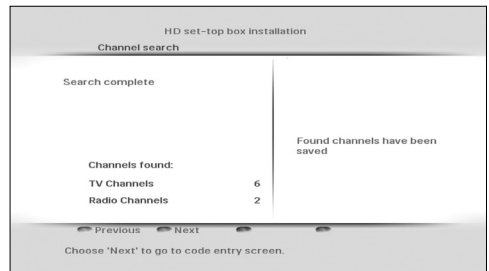


Use **▲ / ▼** to highlight the network that you want to install and press the **green** button. A progress screen displays to confirm that the search is taking place.

When the search is complete, a screen displays the number of TV and radio channels that your HD recorder has found. Your HD recorder automatically saves these channels. Press the **green** button to go to the next step.

Note

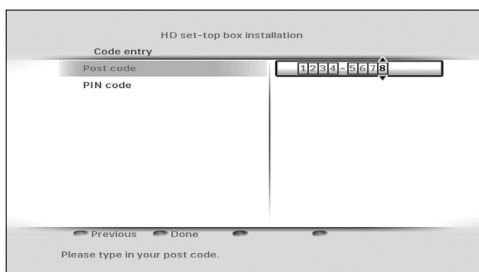
In case your HD recorder does not find any channels, see the 'What if no channels are found?' section on page 13.



Note

Digital terrestrial broadcasting is progressing throughout the UK. Please note that the reception of digital signals may need to be verified as it can be adversely affected by physical elements, such as mountainous areas, high buildings, etc. When analogue broadcasting in your region is switched off, there should be a quality improvement in digital broadcasting. As digital switch over happens, the number of digital channels available in each region may also increase. Please visit this website to find out when the digital switch over is scheduled for your area: www.digitaluk.co.uk

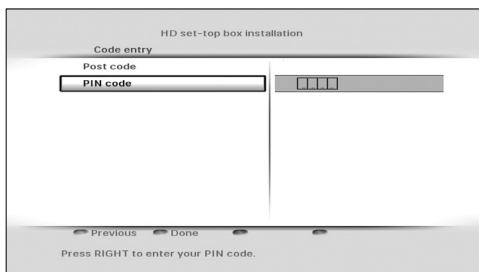
- 6** On the **Code entry** menu, use **▲ / ▼** or the **number** buttons to enter your area's postal code, and then press **OK** to highlight **PIN code**.



Note

Entering your postal code is mandatory. You will not be able to complete the first installation setup without entering your postal code.

To change the default PIN code (0000), press **▶** and use the **number** buttons to enter your new PIN code. You will then be prompted to re-enter your PIN code to confirm.



Note

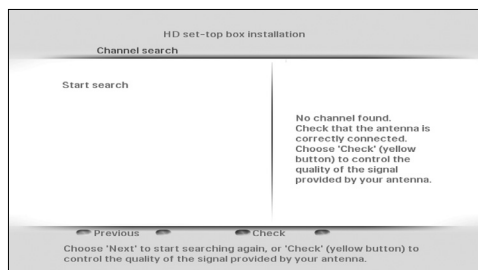
Your new PIN code can be any 4-digit number other than the default PIN code (0000).

Press the **green** button to confirm your choice and complete the installation.

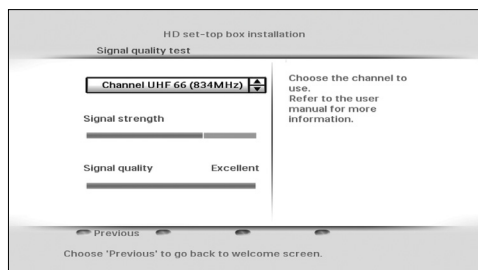
You can now start using your HD recorder.

3.4 What if no channels are found?

In case your HD recorder does not find any channels, check your connections (see pages 11 and 34) and press the **red** button to start the first installation setup again.






If your HD recorder is still not able to find any channels, press the **yellow** button. Use **▲ / ▼** to manually check the quality and strength of the signals received by your antenna in various channel frequencies.




If the **Signal strength** bar is green, then your antenna and HD recorder are properly connected. If it is red, then you need to first check your connection. If the **Signal quality** bar is green, then you can be sure that you are receiving digital broadcast signals. If your reception is not optimal (few channels or “blocky” image), you must check your antenna installation as it may need to be realigned or fixed.

4 Using your HD recorder

4.1 Standby/wake up

To put your HD recorder into standby, press  on your HD recorder's front panel or remote control. To take your HD recorder out of standby, press  again. You can also press **BACK** , **P+/P-** or any **number** button on your remote control to wake up your HD recorder. See page 7 for more information.

4.2 Changing channels



To change channels, use the **P+/P-** on your remote control or your HD recorder's front panel. You can also use the **number** buttons on your remote control. Press **BACK**  to switch to the last channel you were watching. You can also use the on-screen channel lists or channel banner to change channels (see sections 4.4 and 4.5).

Note

Initially, HD programmes are available on channels 50 and 51. Switch to these channels to watch HD programmes.

4.3 Adjusting volume

To increase or decrease the volume, press **VOL+/VOL-**. The volume level is shown briefly on your TV.

To mute or restore the sound, press . When you mute your sound, the  icon is shown in the top right corner of your TV. This icon disappears after a few seconds.



4.4 Using the channel banner

Channel information


When you change a channel, the channel banner appears briefly to show information about the current programme. By default, it appears for 5 seconds. To set the length of time that the channel banner remains on-screen, see page 29.

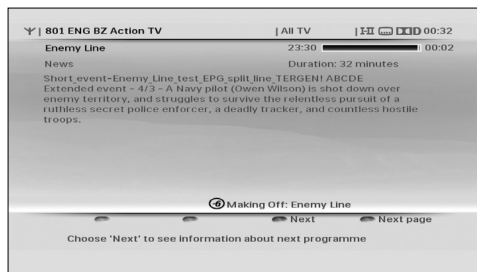
Changing channel

To change the channel, display the channel banner by pressing **INFO**.



- 1 When the channel banner is on-screen, use  /  to see what programmes are currently showing on other channels. If you see a programme you want to watch, press **OK**.



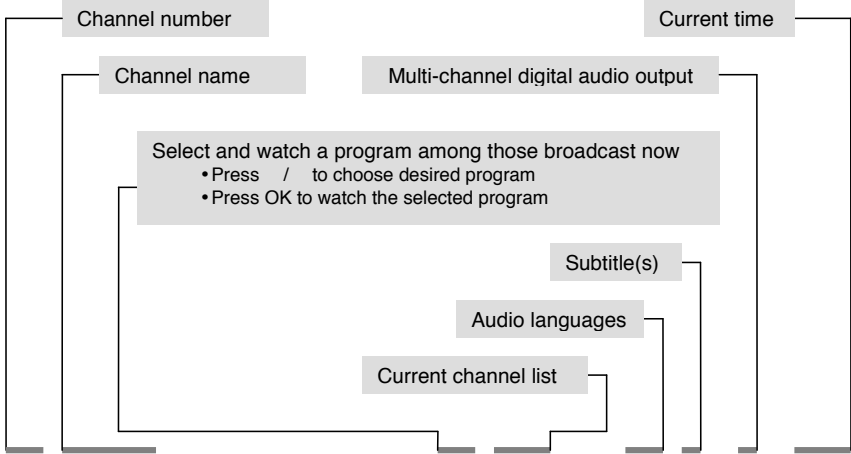
- 2 To display more information about the current programme on the channel listed in the channel banner, press **INFO**  again.



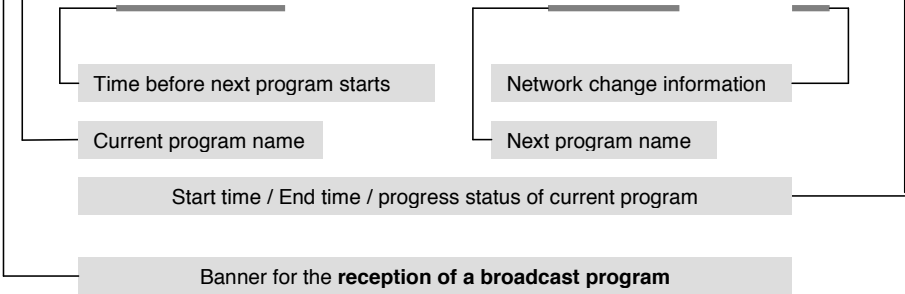
To display what programme is on next (on the channel listed in the channel banner), press the **yellow** button.

- 3 Press **INFO**  a third time, or press **EXIT** to remove the channel banner without changing the channel. Alternatively, press **BACK**  to return to the channel banner.

4.4.1 More about the channel banner content



Y	1 BBC One	▲▼	All TV	HI	Ⓜ	Ⓜ	19:15
Doctor Who		19:00		[Progress Bar]		19:55	
Next in 40 minutes:		Torchwood		✉			



Banner for a **playback** of:

- Either an HDD library program
- Or a paused program

Ⓜ	BBC One	All TV	HI	Ⓜ	Ⓜ	19:15
Doctor Who		0:00		[Progress Bar]		0:55
Recording duration: 00:55						

“**Recording duration**” for a playback from HDD library
Or “**Live on - Program name:**” from a paused program

4.5 Using channel lists

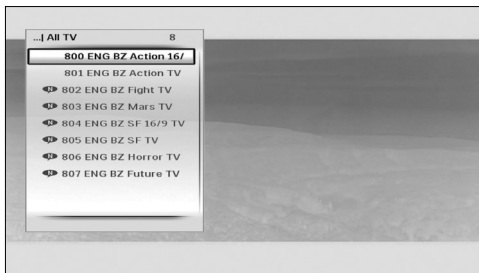
You use the channel list menu to switch to any TV or radio channel from the **All TV** or **All Radio** channel list, or your favourite lists.

Changing channel

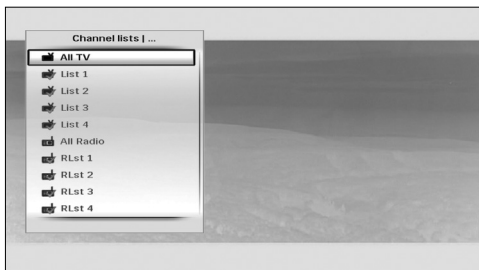
- 1 Press **OK** to display the current channel list.
- 2 Use **▲** / **▼** to select the channel you want to watch.
- 3 Press **OK** to preview the channel; press **OK** again to watch it.

Changing current channel list

- 1 Press **OK** to display all the channels of the current channel list.




- 2 Press **◀** to display all the available channel and favourite lists. To create new favourite lists, see page 27.

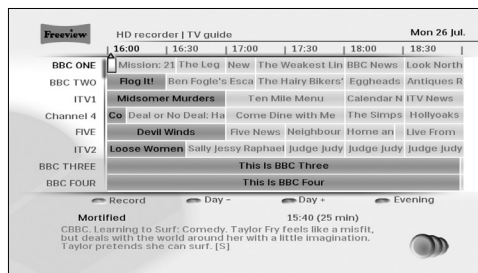




- 3 Use **▲** / **▼** to highlight the list you want to use.
- 4 Press **OK** to confirm and display all the channels of the selected list.
- 5 Use **▲** / **▼** to highlight a channel and press **OK** to preview it. Press **OK** again to watch the channel or press **EXIT** to remove the channel list menu without changing the channel.

4.6 Using the TV guide

The **TV guide** provides you with a listing of all programmes available on all channels for up to eight days, making it easy to find the programmes you want to watch.

- 1 Press **GUIDE**  to display the **TV guide**.




- 2 Use **◀** / **▶** to see what programmes are on at different times on a channel. Use **▲** / **▼** to move through the list of channels. Use the **yellow** (+1 day) and **green** (-1 day) buttons to move forward and backwards by a day through the listings. Use the **blue** button to switch between the evening and current-time TV guide views.
- 3 Press **GUIDE** , **BACK**  or **EXIT** to remove the **TV guide**.

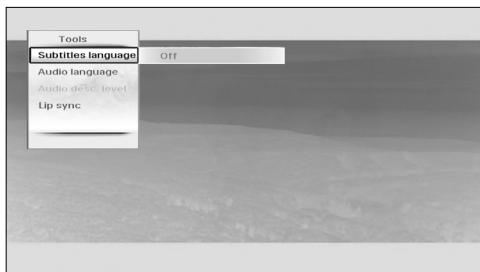
Notes

- You can also schedule a recording using the **TV guide** (see page 19).
- Some channels may not offer an extensive **TV guide**.

4.7 Using the Tools menu



You use the **Tools** menu to display subtitles, change the audio language, control audio description and synchronise audio with video.

- 1 Press **OPTIONS**  to display the **Tools** menu.
- 2 Use **▲** / **▼** to highlight the setting you want to change.



- 3 Press **▶** or **OK** and then press **▲** / **▼** to select an option from the list that appears on the right. You can change these settings using the **Tools** menu:

Settings	Options
Subtitles language	On Off (default)
Audio language	Available languages depend on the broadcast programme.
Audio desc. level	Set the audio description volume. (Available if 'Audio description' is turned on and broadcast.)
Lip sync	Set the DIGITAL audio output delay to synchronise audio with video.


- 4 Press **◀** to save your changes and return to the tools menu.
- 5 Press **OPTIONS** , **BACK**  or **EXIT** to remove the tools menu.

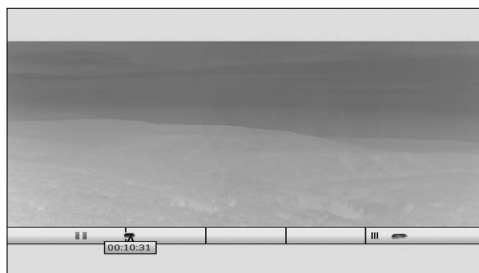
4.8 Pausing live TV




When you switch to a channel, your HD recorder automatically starts recording the programme that is being played and stores it temporarily in the time-shift buffer. When you switch to a different channel, your HD recorder discards the previously recorded programme, and starts recording the current programme. This feature enables you to pause a live programme at any moment and later continue watching it from that point, or instantly rewind and watch what you have seen (or missed) in the last few seconds.

Note

- Your HD recorder stores up to 3 hours of live TV content in the time-shift buffer. At the end of 3 hours, the oldest part of the recording is overwritten.
- Your HD recorder empties the contents of the time-shift buffer when you change the channel, or turn off your HD recorder or put it in standby.

- 1 To pause any live TV programme, press **pause** . The time-shift bar appears.



- 2 To start playback, press **play** .
- 3 To stop playback and return to live TV, press **stop** . In the menu that pops up, make sure that **Back to live ...** is highlighted and press **stop**  again. If you do nothing, this menu disappears after about 5 seconds.

Note

Until you return to live TV viewing, you will not be able to use any other function of your HD recorder.

4.8.1 Instant replay

You can instantly replay what you have seen (or missed) during the last few seconds.

- 1 Press **◀** while watching live TV.
The time-shift bar appears and you are taken back 15 seconds, by default. To increase this time, see the **Instant Replay duration** setting on page 29.
- 2 To return to live TV, press stop **■**. In the menu that pops up, make sure that **Back to live ...** is highlighted and press stop **■** again. Alternatively, you can press **P+/-**.

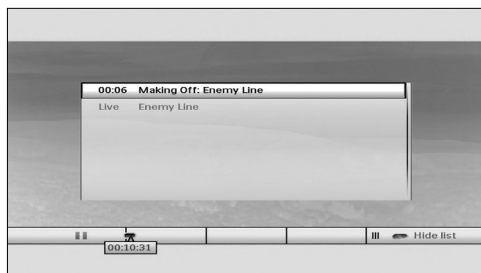
Note

If you have just switched to a channel and have been watching a programme on it for less than 30 seconds (or the **Instant Replay duration** you set), pressing **◀** takes you back to the time you started watching the programme instead of 30 seconds (or the **Instant Replay duration** you set.)

4.8.2 Moving through the time-shift bar

While playing back programmes temporarily stored in the time-shift buffer:

- 1 Press **◀ / ▶** to move to back 15 seconds or forward 30 seconds (by default). To change this time, see the **Instant Replay duration** and **Commercial Skip duration** settings on page 29.
- 2 Press the **yellow** button to jump to the time you started watching the programme or to return to live TV.



In the menu that pops up, use **▲ / ▼** to highlight your choice and press **OK** to confirm.

- 3 To pause playback at any moment, press **pause II**. To restart playback, press **play ▶**.

High-speed playback

- 1 To rewind at twice the speed (x2), press **rewind ◀◀** during playback.
- 2 To increase the speed, press **rewind ◀◀** again, up to 3 times (x4, x32, x128).
- 3 To decrease the speed, press **fast forward ▶▶**.
- 4 To return to normal speed playback, press **play ▶**.
- 5 You can fast forward in the same way as you rewind, just press **fast forward ▶▶** to increase the fast forward speed, and **rewind ◀◀** to decrease the fast forward speed.

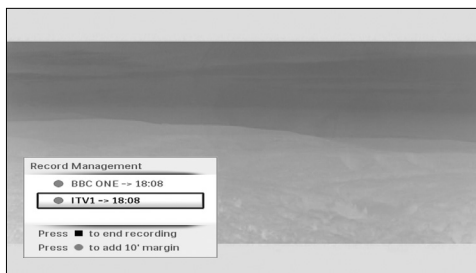
Slow-motion playback

- 1 To rewind or forward in slow motion, press **pause II** and then **rewind ◀◀** or **fast forward ▶▶** to choose the speed you want (x1/2 or x1/4).
- 2 To return to normal speed playback, press **play ▶**.

4.9 Recording programmes

4.9.1 Instant recording

- 1 To instantly start recording a programme that you are watching, press **record ●**. A message appears confirming that the programme is being recorded to your HD recorder's hard disk. The **record** indicator on the front panel also lights up.



By default, the instant recording feature is designed to record only the next two hours of the selected programme. The end time is shown after the programme name in the **Record Management** pop-up menu.

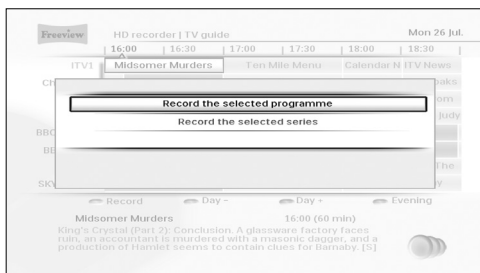
To increase this time by 10 seconds, press **record** ● when the **Record Management** menu is on-screen. By pressing **record** ● multiple times, you continue to increment the end time by 10 seconds. You can also change this end time using the **Scheduled recordings** menu (see page 21).

To record a complete programme or series, use the **TV guide**. See the next section. If you try to record a programme when two other programmes are already being recorded, the **Conflict - check guide** message is displayed in the **Record Management** pop-up menu.

- 2 To stop recording, press **stop** ■. In the **Record Management** menu that pops up, use ▲ / ▼ to highlight the programme you no longer want to record and press stop ■ again.

4.9.2 Scheduling recordings

- 1 Press **GUIDE** [] to display the **TV guide**.
- 2 Use ▲ / ▼ / ◀ / ▶ to highlight the programme you want to record, and press the **red** button. In the menu that pops up, use ▲ / ▼ to highlight **Record the selected programme** or **Record the selected series** and press **OK** to confirm.



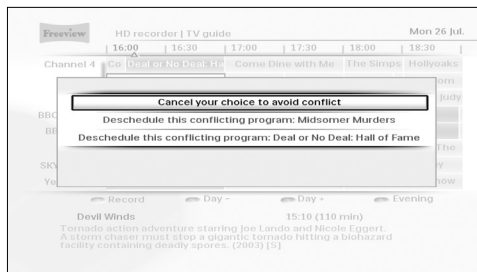
If the programme is on now, your HD recorder starts recording instantly. If it is on at a later time, your HD recorder will record the programme when it starts. The

programme is highlighted in red in the **TV guide**.



You can also use the **Scheduled recordings** menu to view all the programmes you have selected for recording (see page 21).

- 3 When you select a programme to record, your HD recorder checks whether it is on at the same time as any other programmes you have previously selected for recording. If more than two selected programmes are on at the same time, this creates a conflict. Your HD recorder lets you know about the conflict and shows which previously scheduled recordings you can cancel in order to record your new selection.



If a conflict was caused due to a change in the time of the broadcast programme, then you use the **Scheduled recordings** menu to view and resolve such conflicts (see page 21).

- 4 To cancel the scheduled recording of a programme, use ▲ / ▼ / ◀ / ▶ to highlight the programme in the **TV guide**, and press **OK**.

Note

When you select a programme to record, your HD recorder checks whether there is enough disk space to record it. If the disk is nearly full, your HD recorder will automatically delete some of your old and unprotected programmes to make space for the new programme.

4.9.3 Time-shift bar for a paused programme

Your HD recorder automatically records the program you are watching.

This recording may fill in a buffer for a maximum of 3 hours.

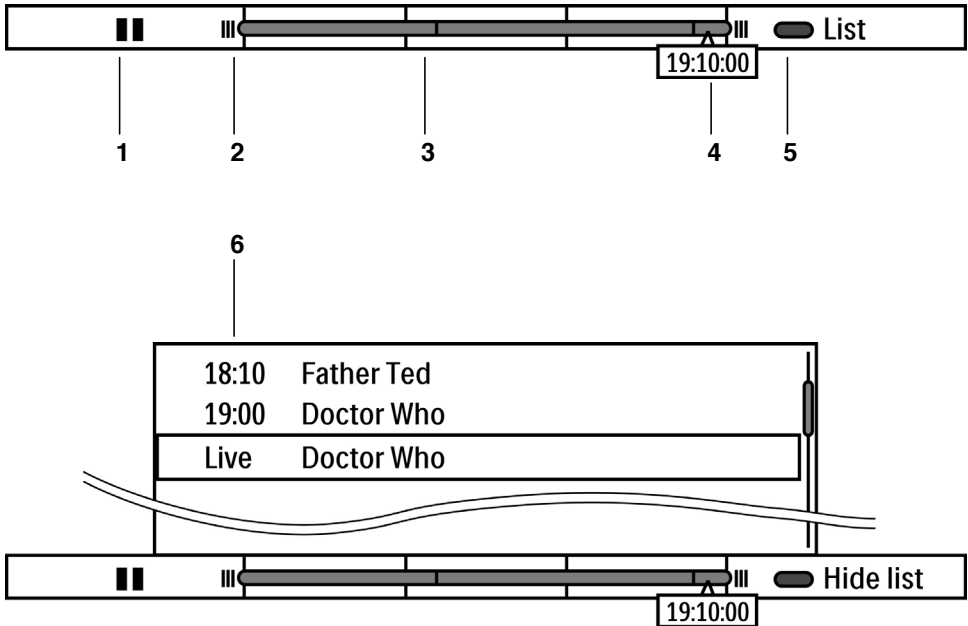
You can:

- Pause live TV while your HD recorder keeps on recording the live programme.
- Restart watching from the pause.
- Go to live TV or any program sequence in between.

The time-shift bar helps you watch paused live TV from the buffer.

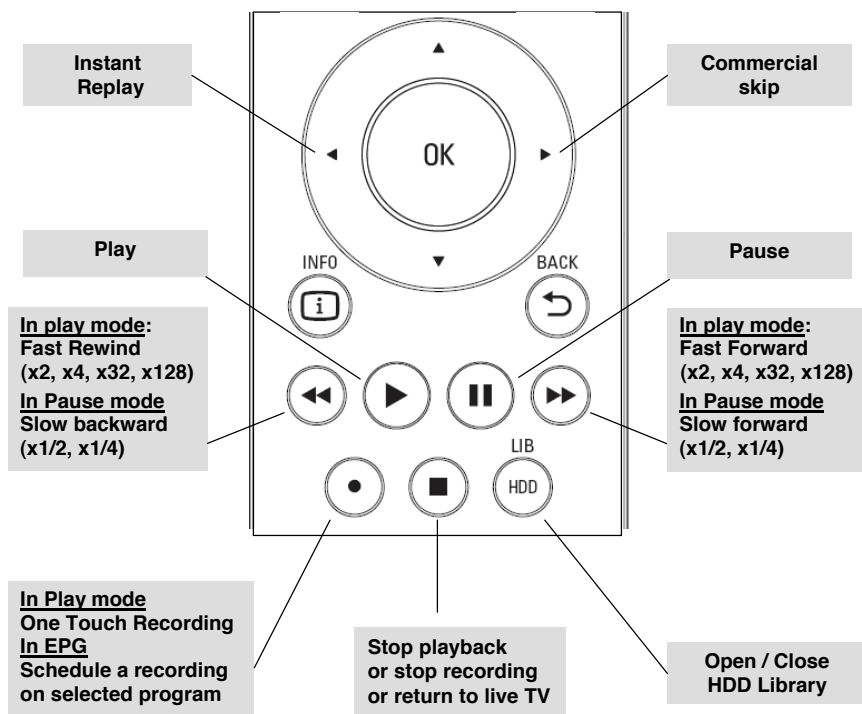
Note

The contents of the buffer are flushed when you change the channel.



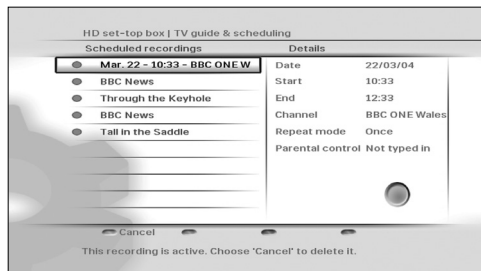
- | | | | |
|---|---------------------------------|---|------------------------------------|
| 1 | Play mode | 4 | Time index |
| 2 | Full buffer indicator (3 hours) | 5 | Open/Close the buffer program list |
| 3 | Buffer progress bar | 6 | List of program in the buffer |

4.9.4 Controlling playback and recording



4.9.5 Viewing scheduled recordings

- 1 Press **OK** to display the **Scheduled recordings** menu. You can also access this menu from the **Main** menu (**MENU > TV guide & scheduling > Scheduled recordings**)
- 2 The **Scheduled recordings** menu appears, which shows all the programmes you have selected to record.



- 3 To cancel the scheduled recording of a programme, use **▲ / ▼** to highlight it and press the **red** button.
- 4 To change the end time of an instant recording, use **▲ / ▼** to highlight **End time** and press the **OK** button. In the menu that appears, use **▲ / ▼ / ◀ / ▶** to change the end time.
- 5 Any scheduled recording conflicts, which are caused due to a change in the time of the broadcast programme, are indicated by a warning symbol next to the programme name. To resolve such conflicts, select a programme that you no longer want to record and press the **red** button to cancel it.
- 6 Press **EXIT** to remove the **Main** menu.

4.9.6 Watching recorded programmes

- 1 To view all the recorded programmes, press **HDD (LIB)**.
The **Recordings** menu appears.



- 2 All recorded programmes are protected by default to prevent you from deleting them accidentally. To delete a protected recording, use **▲ / ▼** to highlight it, press the **blue** button to unprotect it, and then press the **red** button to delete it. A message appears asking you to confirm. If you are sure, press the **green** button; if not, press the **red** button.
- 3 To lock a recording and set viewing restrictions, use **▲ / ▼** to highlight the recording and press the **green** button. Note that if the **Parental control limits** is set to **off** (see page 30), your HD recorder will let you watch a locked recording without entering your PIN code.
- 4 To sort the list, press the **yellow** button. In the pop-up menu, use **▲ / ▼** to highlight how you would like to sort the list and press **OK**.
- 5 To playback a recording, use **▲ / ▼** to highlight it and press **OK** or **play ►**.
To pause playback at any moment, press **pause II**.
Press **◀ / ►** to move to back 15 seconds or forward 30 seconds (by default). To change this time, see the **Instant Replay duration** and **Commerical Skip duration** settings on page 29.
To rewind or forward at high speed, press **rewind ◀◀** or **fast forward ►►**, during playback, up to 4 times to choose the speed (x2, x4, x32 or x128).

To rewind or forward in slow motion, press **pause II** and then **rewind ◀◀** or **fast forward ►►** to choose the speed you want (x1/2 or x1/4).

To stop playback and return to the **Recordings** menu, press **stop ■** twice.

- 6 Press **EXIT** to remove the **Recordings** menu and return to live TV.

⊖ Note

You can also access the **Recordings** menu from the **Main** menu – press **MENU** to access the **Main** menu; use **▲ / ▼** to highlight **Library** and press **►** or **OK**.

⊖ Note

Press **HDD (LIB)** to check the free disk space available for recording.

⊖ Note

You can also check the available recording time on your hard disk:

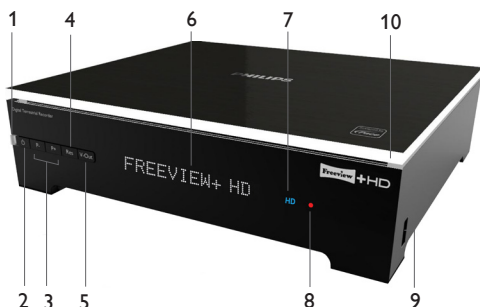
- 1 Press **Menu**.
- 2 Highlight **Settings** and press **OK**.
- 3 Highlight **Set-up** and press **OK**.
- 4 Highlight **Hard disk drive information**.

The available recording time is shown on the right side of the screen.

5 Using more of your HD recorder

5.1 HD recorder

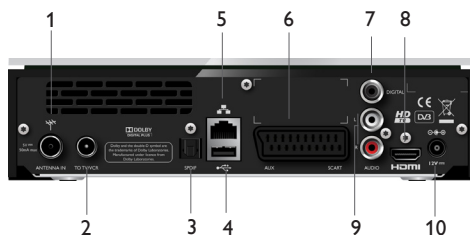
Front panel



- 1 **Standby indicator:**
Red: initialisation mode and standby mode
Orange: active-standby mode
- 2 **standby button:** Switches your HD recorder into or out of standby
- 3 **P+ & P- buttons:** To change channel up or down
- 4 **Res button:** To change the HDMI output resolution to **Auto** (default), **576i**, **576p**, **1080i** or **1080p**
- 5 **V-Out button:** To change the active video output to **HDMI** (default) or **SCART**
- 6 **Display:** 16-digit alphanumeric display
- 7 **HD indicator:** Lights up when you are watching an HD channel
- 8 **Record indicator:** Lights up when your HD recorder is recording a programme
- 9 **USB 2.0*:** Universal Serial Bus port
- 10 **Top lighting**

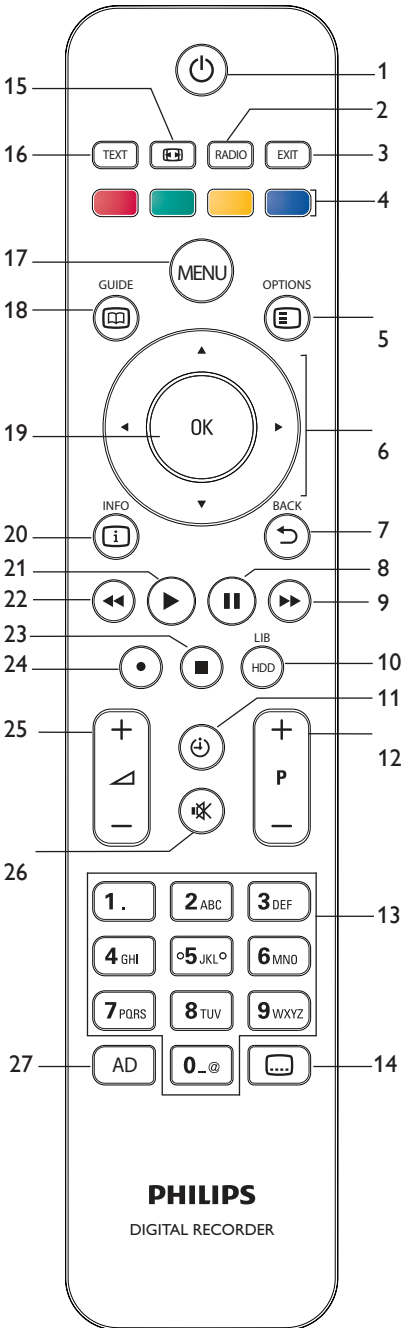
* Safe extra low voltage

Rear panel



- 1 **Antenna IN*:** To connect your aerial cable from the wall socket
- 2 **To TV/VCR*:** Antenna output to TV/VCR (antenna signal)
- 3 **SPDIF audio out*:** To connect an optical cable to an hi-fi amplifier
- 4 **USB 2.0*:** Universal Serial Bus port
- 5 **Ethernet*:** To connect your HD recorder to an Internet access point
- 6 **AUX SCART*:** To connect to the SCART connector on your standard-definition TV
- 7 **DIGITAL audio out*:** To connect an hi-fi amplifier
- 8 **HDMI*:** To connect to the HDMI input connector on your high-definition TV
- 9 **AUDIO L + R*:** To an hi-fi amplifier
- 10 **Power*:** To connect the 12V power supply unit

5.2 Remote control



- | | | |
|----|----------------|--|
| 1 | | Switch to standby or wake up from standby |
| 2 | RADIO | Switch between radio and TV channels |
| 3 | EXIT | Remove menus, channel banner and channel lists |
| 4 | Colour buttons | Used in contextual menus and MHEG applications |
| 5 | | Open/close 'Tools' menu |
| 6 | | Move up/down/left/right within lists or menus |
| 7 | | Return to the previous channel or menu screen |
| 8 | | Pause live TV |
| 9 | | Fast forward |
| 10 | HDD (LIB) | Open/close 'Recordings' menu |
| 11 | | Open/close 'Scheduled recordings' menu |
| 12 | P +/- | Change channel up/down |
| 13 | Number buttons | Alphanumeric keypad |
| 14 | | Turn subtitles on/off |
| 15 | | Change picture format |
| 16 | TEXT | Open/close MHEG applications |
| 17 | MENU | Open/close 'Main' menu |
| 18 | | Open/close 'TV guide' |
| 19 | OK | Confirm selection in menu or list. |
| | | Open/close channel list |
| 20 | | Open/close channel banner |
| 21 | | Play |
| 22 | | Rewind |
| 23 | | Stop |
| 24 | | Start instant recording |
| 25 | VOL +/- | Turn volume up/down |
| 26 | | Mute/restore sound |
| 27 | AD | Turn Audio Description on/off |

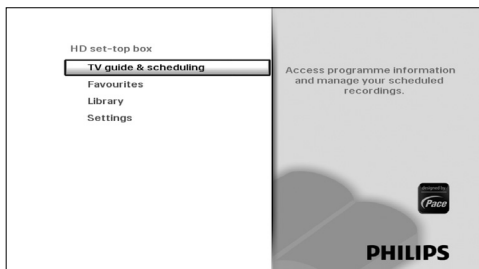
5.3 Front-panel display messages

PHILIPS	Your HD recorder is starting up
001 BBC HD	Your HD recorder is tuned to TV channel 1
r004 BBC FOUR	Your HD recorder is tuned to radio channel 4
Signal lost	Antenna signal is not available
Subtitle ON	Subtitle on
Subtitle OFF	Subtitle off
Menu	Main menu is open
Channel list	Channel list is open
Guide	TV guide is open
Standby	Your HD recorder is in the standby mode
HDMI/DVI	HDMI is the active A/V output (recommended) of your HD recorder
AUX SCART	AUX SCART is the active A/V output of your HD recorder
16:9 Pillar	Picture format is 4:3 with black bars
16:9 Extended	Picture format is 4:3 stretched to 16:9
16:9 Zoom	Picture format is 4:3 zoomed in to the screen width

Software upgrade Upgrade 100% Storing software Upgrade complete	Software update is starting Software is being loaded Software is being saved Successful update
Resolution AUTO Resolution 576i Resolution 576p Resolution 720p Resolution 1080i Resolution 1080p	Automatic resolution adjustment (recommended) Resolution is set to 576i Resolution is set to 576p Resolution is set to 720p Resolution is set to 1080i Resolution is set to 1080p
HDD Library	Recording library is open
▶ BBC HD ◀ BBC HD ⏸ BBC HD ▶▶ BBC HD ◀◀ BBC HD	Play Rewind Pause Fast forward Fast rewind
First Install	Your HD recorder is in the first installation setup

5.4 Using the Main menu

- 1 Press **MENU** to display the **Main** menu.



- 2 Use \blacktriangle / \blacktriangledown to highlight a setting.
- 3 Press \blacktriangleright or **OK** to confirm your choice.
- 4 Press **BACK** \curvearrowright to return to the **Main** menu. Press **BACK** \curvearrowright again, **MENU** or **EXIT** to remove the **Main** menu.

Note

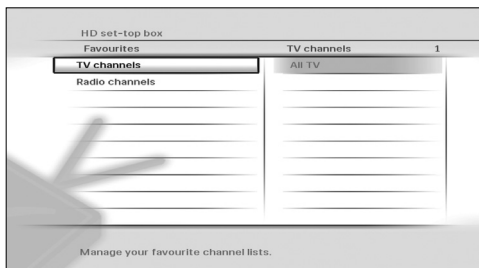
Use the **colour** buttons to perform contextual actions, which are described at the bottom of the screen.

5.4.1 Managing favourite lists

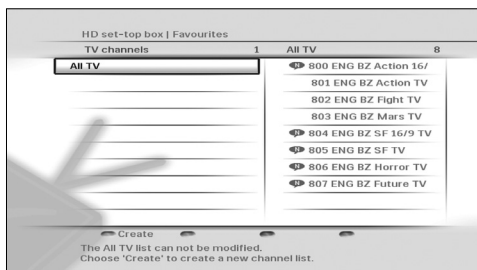
Your HD recorder allows you to create favourite lists that include the channels you watch the most. This lets you access your favourite channels quickly instead of scrolling through the entire list.

Creating a favourite list

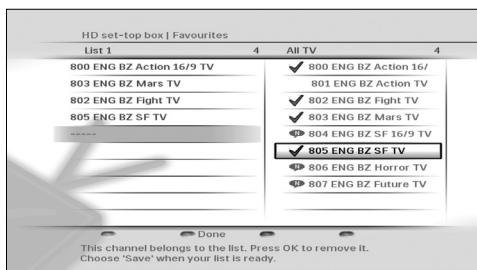
- 1 On the **Main** menu, make sure that **Favourites** is highlighted and press \blacktriangleright or **OK**. The **Favourites** menu appears.



- 2 Use \blacktriangle / \blacktriangledown to highlight either **TV channels** or **Radio channels**, and press \blacktriangleright or **OK**. The menu now displays the selected full channel list (**All TV** or **All Radio**) and the existing favourite lists.



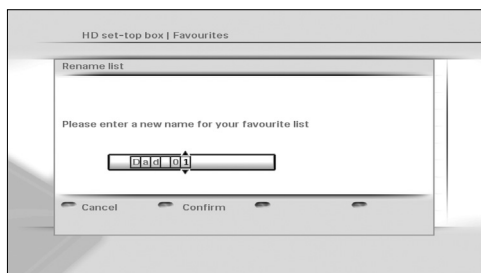
- 3 Press the **red** button to create a new favourite list. Your HD recorder, by default, names the new favourite list as **List1** (for TV channels) or **RLst1** (for radio channels). You can create up to four separate TV and radio favourite lists. To rename these lists, see page 28.
- 4 To add a channel to your favourite list, use \blacktriangle / \blacktriangledown to highlight a channel and press **OK**.



- 5 To remove a channel from your favourite list, use \blacktriangle / \blacktriangledown to highlight it and press **OK**.
- 6 When you are finished adding all your channels, press the **green** button. Press \blacktriangleleft to return to the **Favourites** menu.

Renaming favourite lists

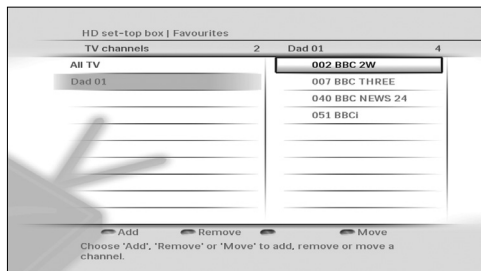
- 1 From the **Favourites** menu, use ▲ / ▼ to highlight either **TV channels** or **Radio channels** and press ► or **OK**.
The menu now displays the default channel list (**All TV** or **All Radio**) and any existing favourite lists.
- 2 Use ▲ / ▼ to highlight the favourite list that you want to rename, and press the **blue** button.
- 3 In the **Rename list** menu that pops up, use ▲ / ▼ or the **number** buttons to rename your favourite list. Press the **green** button to confirm or press the **red** button to return to the previous menu without saving any changes.



- 4 Press ◀ or **BACK** ↶ to return to the **Favourites** menu.

Modifying/Editing favourite lists

- 1 From the **Favourites** menu, use ▲ / ▼ to highlight either **TV channels** or **Radio channels** and press ► or **OK**.
The menu now displays the default channel list (**All TV** or **All Radio**) and any existing favourite lists.
- 2 Use ▲ / ▼ to highlight the favourite list that you want to modify, and press ► or **OK**.



- 3 To add a channel, press the **red** button.
Then use ▲ / ▼ to highlight the channel you want to add and press **OK**. Press the **green** button to save your changes.
- 4 To remove a channel, use ▲ / ▼ to highlight it and press the **green** button.
- 5 To reorder the channels in your favourite list, use ▲ / ▼ to highlight a channel you want to move and press the **blue** button.
Use ▲ / ▼ to move the channel up or down and press **OK**.
- 6 Press ◀ to return to the **Favourites** menu.

Deleting favourite lists

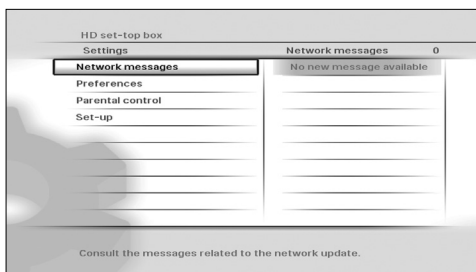
- 1 From the **Favourites** menu, use ▲ / ▼ to highlight either **TV channels** or **Radio channels** and press ► or **OK**. The menu now displays the default channel list (**All TV** or **All Radio**) and any existing favourite lists.
- 2 Use ▲ / ▼ to highlight the favourite list that you want to delete, and press the **green** button. A message appears asking you to confirm. If you are sure, press the **green** button; if not, press the **red** button.
- 3 Press ◀ or **BACK** ↶ to return to the **Favourites** menu.

5.4.2 Using the Settings menu

You use the **Settings** menu to customise your HD recorder. For example, you can lock certain channels, change display settings, etc.

Accessing the Settings menu

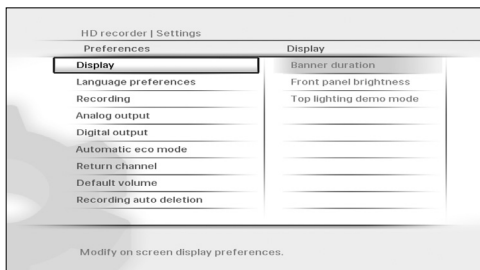
- 1 From the **Main** menu, use ▲ / ▼ to highlight **Settings** and press ► or **OK**.
The **Settings** menu appears.



- 2 Press ◀ or **BACK** ↶ to return to the **Main** menu.

Setting your preferences

- From the **Settings** menu, use ▲ / ▼ to highlight **Preferences** and press ► or **OK**. The **Preferences** menu appears.



- Use ▲ / ▼ / ◀ / ▶ / **OK** to navigate through the settings and options, and make changes.
- Press ◀ or **BACK** ↵ to save your changes and return to the previous menu.

You use the **Preferences** menu to change these settings:

Display

- **Banner duration** - Use this to set the length of time (3 to 10 seconds) that the channel banner remains on-screen when you change channel. By default, it is set to **5 seconds**.
- **Front panel brightness** - Use this to set the brightness of the front-panel display. You can set this to **Low**, **Medium** (default) or **High**.
- **Top lighting demo mode** - Use this to turn on or off (default) the lighting around the top-panel of your HD recorder.

Language preferences

- **Information language** - Use this to set your preferred language for displaying programme information to **English** (default), **Gaelic**, **Welsh** or **Irish**.
- **Audio language** - Use this to set your preferred audio language to **English** (default), **Gaelic**, **Welsh** or **Irish**.
- **Default subtitles mode** - Use this to set how you prefer to display subtitles. You can set this to **Activated**, **Not activated**, **Auto when no correct audio** (default),

Auto when audio is muted or **For hearing-impaired**.

- **Subtitles language** - Use this to set your preferred language for subtitles to **English** (default), **Gaelic**, **Welsh** or **Irish**.


Recording

- **Instant replay duration** - Use this to set the instant replay duration (see page 18). It is also used while moving through the time-shift bar (see page 18) or a recording (see page 22). You can set this to **15 seconds** (default), **30 seconds**, **1 minute**, **2 minutes** or **5 minutes**.
- **Commercial skip duration** - Use this to set the typical duration of commercials in between programmes. You use this while moving through the time-shift bar (see page 18) or a recording (see page 22). You can set this to **15 seconds**, **30 seconds** (default), **1 minute**, **2 minutes** or **5 minutes**.

Analog output

- **Video on AUX** - Use this to set the type of analogue video signals that are output on the **AUX SCART** connector of your HD recorder. You can set this to **RGB** (default when V-Out is set to AV) or **CVBS** (default when V-Out is set to HDMI).
- **Audio on AUX** - This setting applies when your HD recorder is connected via a SCART Cable to a standard-definition TV. Use this to set the type of analogue audio signals that are output on the **AUX SCART** connector of your HD recorder. You can set this to **Mono** or **Stereo** (default).
- **TV format** - Use this to set the format of the analogue video that is output on the **AUX SCART** connector of your HD recorder. You can set this to **4/3 Letter Box**, **4/3 Centre Cut Out** or **16/9** (default). The options determine how widescreen (16:9) programmes show on a standard-definition TV with aspect ratio of 4:3.

Digital output

- **HDMI output resolution** - Use this to set the HDMI video resolution to **576i**, **576p**, **720p**, **1080i**, **1080p**, **Auto** (default) or **Original**. Note that you can also change this setting using the **RES** button on the front panel of your HD recorder.
- **Audio capabilities on HDMI** - Use this to set the HDMI audio format to **PCM** (default) or **Auto***.
- **Audio capabilities on S/PDIF** - Use this to set the S/PDIF audio format to **PCM** (default) or **Dolby Digital***. You can also set this to **Not connected**.
- **Easy Link mode** - For future use.
- **TV format** - Use this to set the format of the high-definition video that is output on the **HDMI** connector of your HD recorder. You can set this to **16/9 Pillar Box** (default), **16/9 Full Screen** or **16/9 Zoom**. These options determine how standard (4:3) programmes show on a TV with aspect ratio of 16:9. Note that you can directly change this setting using the **picture format** button  on your remote control.

*The **Auto** and **Dolby Digital** settings on HDMI or S/PDIF are not recommended until your HD recorder has been updated with the appropriate software.

Visit www.philips.com/support regularly to check if the relevant software update is available.

Automatic eco mode

Use this to set the time after which your inactive HD recorder automatically enters into the active standby mode. You can set this to **off**, **3 hours** (default), **4 hours**, **5 hours**, **6 hours**, **7 hours** or **8 hours**.

Return channel

Use this to configure your HD recorder to connect to the internet, which then serves as a return channel to your Digital TV service provider. The return channel is necessary to use any interactive applications

that your Digital TV service provider may offer. Before configuring the return channel, be sure to connect your HD recorder to your network router using an Ethernet cable. Then choose either **DHCP** to set up your connection automatically or manually enter all the parameters like **IP address**, **Network mask**, **Gateway** and **DNS** settings to match your router's settings.

Default volume

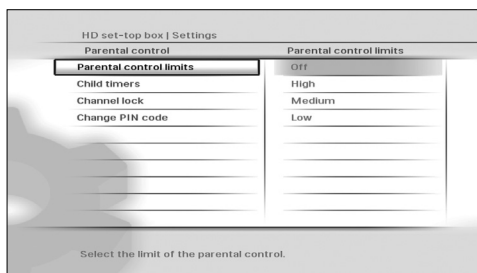
Use this to set the default volume at wake-up of your HD recorder.

Recording auto deletion

When you select a programme to record, your HD recorder checks whether there is enough disk space to record it. If the disk is nearly full, your HD recorder will automatically delete some of your old and unprotected programmes to make space for the new programme. Use this setting to turn off or on (default) this feature.

Changing parental control settings

- 1 From the **Settings** menu, use **▲ / ▼** to highlight **Parental control** and press **►** or **OK**. The **Parental control** menu appears.



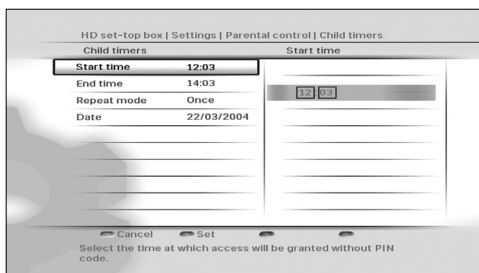
- 2 To change the parental control severity settings, use **▲ / ▼** to highlight **Parental control limits**, and press **►** or **OK**. Use **▲ / ▼** to highlight the severity level you want to set, and press **◀** or **OK** to save your changes and return to the previous menu. Note that if you set the **Parental control limits** to **Off**, the child timers and channel

lock settings (see below) will not have any effect.

Note

When **Parental control limits** is set to **ON**, menu items like **Parental control** and **Set-up** will be protected by the PIN code.

- To create a new child timer, use ▲ / ▼ to highlight **Child timers**, and press ► or **OK**. Make sure that **Define child timer** is highlighted and press ► or **OK**.



Use ▲ / ▼ / ◀ / ▶ to set the time period during which you will be able to watch any unlocked channel without having to enter your PIN code. Press the **green** button to confirm.

To delete the child timer, make sure **Modify child timer** is highlighted and press the **red** button.

To modify the child timer, make sure **Modify child timer** is highlighted and press ► or **OK**. Make the required changes and press the **green** button to confirm.

- To lock a channel, use ▲ / ▼ to highlight **Channel lock**, and press ► or **OK**. Use ▲ / ▼ to highlight the channel you want to lock, and press **OK**. Press ◀ or **BACK** ↶ to return to the previous menu.
- To change your PIN code, use ▲ / ▼ to highlight **Change PIN code**, and press ► or **OK**. Use the **number** buttons to first enter your current PIN code and then enter your new PIN code. Use the **number** buttons to enter your new PIN code again, for confirmation. If you correctly entered the

PIN codes, your HD recorder briefly displays a message confirming that your PIN has been changed, and then returns to the **Parental Control** menu.

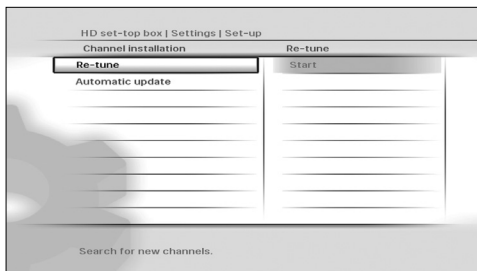
Note

Your new PIN code can be any 4-digit number other than the default PIN code (0000).

- Press ◀ or **BACK** ↶ to return to the **Settings** menu.

Retuning your HD recorder

- From the **Settings** menu, use ▲ / ▼ to highlight **Set-up** and press ► or **OK**.
- In the **Set-up** menu that appears, make sure **Channel installation** is highlighted and press ► or **OK**.
- In the **Channel Installation** menu that appears, make sure **Re-tune** is highlighted and press ► or **OK**.



A progress screen displays to confirm that the search is taking place.

Press the **green** button to save any new channels and return to the **Set-up** menu. Press the **red** button to cancel the search and return to the **Set-up** menu.

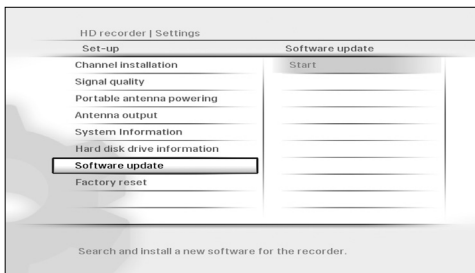
Note

The **Network messages** menu (under the **Settings** menu) alerts you of any changes to your network such as recently added channels, services, etc. To save time, check this menu before retuning your HD recorder.

Updating your HD recorder's software manually

You can manually update your HD recorder software using a USB memory stick.

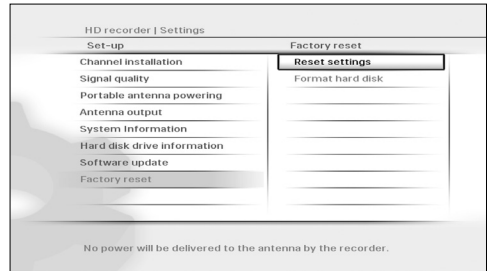
- 1 Download the latest software file from the Philips website (www.philips.com/support), unzip it and transfer it to a USB memory stick. Be sure to place the downloaded file in the top-level folder of your USB memory stick.
- 2 Connect your USB memory stick to the USB connector on the rear panel (or on the side) of your HD recorder.
- 3 From the **Settings** menu, use ▲ / ▼ to highlight **Set-up** and press ► or **OK**.
- 4 In the **Set-up** menu that appears, use ▲ / ▼ to highlight **Software update** and press ► or **OK**.



Your HD recorder locates the software available on your USB memory stick and displays a confirmation message. Press the **green** button to install the software immediately. Press the **red** button to cancel and return to the previous menu. If you press the **green** button, your HD recorder updates the software and restarts. You may, depending on the update, then be required to complete the first installation setup (see page 11).

Restoring factory default settings

- 1 From the **Settings** menu, use ▲ / ▼ to highlight **Set-up** and press ► or **OK**.
- 2 In the **Set-up** menu that appears, use ▲ / ▼ to highlight **Factory reset** and press **OK** twice.



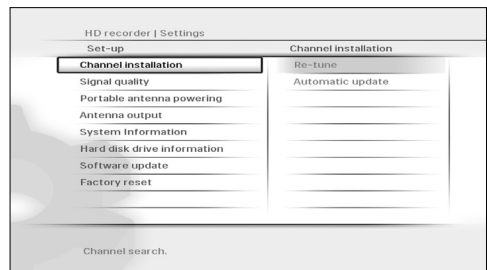
A message appears asking you to confirm. If you are sure, press the **green** button, or press the **red** button to cancel and return to the previous menu. If you press the **green** button, your HD recorder restores the factory default settings and restarts. You will then be required to complete the first installation setup (see page 11).

Note

Resetting your HD recorder to the factory default settings erases all of your preferences and settings. For example, all of your favourite lists and recording timers will be erased.

Changing other system settings

- 1 From the **Settings** menu, use ▲ / ▼ to highlight **Set-up** and press ► or **OK**. The **Set-up** menu appears.



- 2 To turn on or off the channel updates that automatically happen when your HD recorder is in the active-standby mode, make sure **Channel installation** is highlighted and press ► or **OK**. Press ▼ to highlight **Automatic update** and press ► or **OK**. Use ▲ / ▼ to highlight **On** or **Off**.

Press ◀ to save your changes and return to the previous menu.

- 3** To check the signal quality of any channel that you are receiving, press ▼ to highlight **Signal quality** and press ▶ or **OK**. In the **Signal quality test** menu that appears, use ▲ / ▼ to select a channel that you want to check. Press ◀ or **BACK** ↶ to return to the previous menu.

- 4** To turn on or off powering your **active-indoor** antenna using the **Antenna IN** connector on the rear panel of your HD recorder, press ▼ to highlight **Portable antenna powering** and press ▶ or **OK**. Use ▲ / ▼ to highlight **Off** or **On**. Press ◀ to save your changes and return to the previous menu.

ⓘ Note

Set **Portable antenna powering** to **On** only if you need to power an active-indoor antenna that requires a 5V power supply not exceeding 50 mA current consumption. Be sure to read your indoor antenna's user manual before turning this setting on.

- 5** To control antenna output, press ▼ to highlight **Antenna output** and press ▶ or **OK**. Use ▲ / ▼ to highlight **Inactive in eco mode** or **Always active**. Press ◀ to save your changes and return to the previous menu.

ⓘ Note

If **Antenna output** is set to **Inactive in eco mode** while **Portable antenna powering** is set to **On**, the device(s) connected to the **To TV/VCR** output will not receive the antenna signal.

- 6** To see information about your HD recorder, press ▼ and highlight **System information**. Details such as software version, model number, serial number, etc., are displayed on the right.
- 7** To see the available space on your HD recorder's hard-disk drive, press ▼ and highlight **Hard disk drive information**.

- 8** To format your HD recorder's hard disk, press ▼ to highlight **Factory reset** and press ▶ or **OK**. Press ▼ to highlight **Format hard disk** and press **OK**. In the menu that pops up, press the **green** button to confirm, or the **red** button to cancel and return to the previous menu.

- 9** Press ◀ or **BACK** ↶ to return to the **Settings** menu.

6 Maintenance

6.1 Cleaning

For cleaning, use a soft, damp (not wet) cloth. Never use any abrasive cloth and aerosol cleaners

6.2 Replacing

Your HD recorder does not contain any user-serviceable parts. Do not attempt to open it. All maintenance work must be carried out by qualified service centres.

6.3 Disposing

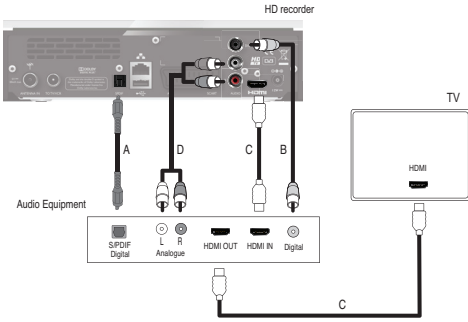
Your HD recorder is designed and manufactured with high-quality materials and components, which can be recycled and reused.

Please inform yourself about the local separate collection process for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

7 Accessories and connections

7.1 Connecting your audio equipment



Option A – Optical S/PDIF connection (Digital)

Connect the **SPDIF** audio output of your HD recorder to the relevant audio input of your audio equipment using an optical S/PDIF cable (not supplied).

Consult the user manual of your audio equipment to choose the proper digital audio inputs.

Option B – Electrical S/PDIF connection (Digital)

Connect the **DIGITAL** audio output of your HD recorder to the relevant audio input of your audio equipment using an electrical S/PDIF cable (not supplied).

Refer to the user manual of your audio equipment to choose the proper digital audio input.

Note

With a digital connection via the **DIGITAL** output of your HD recorder, mute and volume operations are managed by your audio equipment and not by your HD recorder.

Option C - HDMI connection (Digital)

Recent amplifiers are fitted with one or more HDMI source input(s) and one HDMI output.

Recommended connection

- Connect the HDMI output of your HD recorder to an HDMI source input of your amplifier.
- Connect the HDMI output of your amplifier to an HDMI input of your TV.

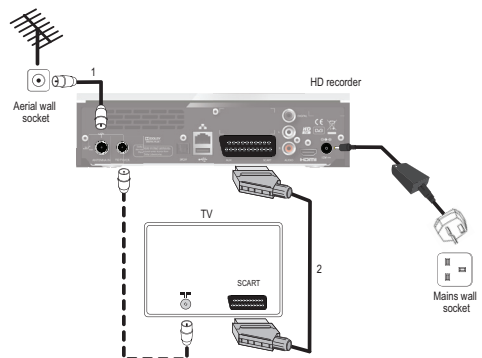
System settings

- For your HD recorder, set the **Audio capabilities on HDMI** setting (under **Menu > Settings > Preferences > Digital output**) to **AUTO**.
- Select the correct A/V source on your TV.
- Select the correct A/V source on your amplifier.
- Volume controls and necessary Lip sync adjustments are performed by your amplifier. Refer to your amplifier's user manual.

Option D – Analogue connection

Connect the L/R audio outputs to the relevant audio inputs of your audio equipment using a double CINCH cable (not supplied). Refer to the user manual of your audio equipment to choose the proper analogue audio inputs.

7.2 Connecting your standard-definition TV



- 1 Connect the aerial cable (not supplied) from the aerial wall socket to the **Antenna IN** connector on the rear panel of your HD recorder.
- 2 Use a SCART cable (not supplied) to connect the **AUX** connector on the rear panel of your HD recorder to the SCART input connector of your standard-definition TV.
- 3 Connect your TV to the mains. Use your TV's remote control to select the SCART input connector, which is connected to your HD recorder, as the the A/V source. If necessary, refer to your TV's user manual.
- 4 Connect your HD recorder to the mains and wait until your HD recorder wakes up ('**First Install**' appears on the front-panel display).
Press the **V-Out** button on the front panel twice. '**AUX SCART**' now appears on the front-panel display and the 'Welcome' screen appears on your TV.
See section 3.3, Installing your HD recorder, on page 11 for instructions on completing the first installation setup from step 3.

Note

Optionally, you can also use the supplied RF cable to connect the RF output connector (labelled **To TV/VCR**) of your HD recorder to the RF input connector of your TV.

8 Guarantee and service

For the Philips warranty applicable to your HD recorder, please visit the Philips website: www.philips.com/guarantee.

In case you do not have an Internet connection, please contact your local Philips Consumer Care Centre (see page 42).

9 Technical data

This product is in conformity with European 95/47/EC and 2002/21/EC directives. The product complies with the following European council Directives: 2006/95/EEC and 2004/108/EC.

Front end

- Dual front end DVB-T2

Video decoding

Standard definition

- MPEG2 MP@ML
- MPEG4 AVC MP@L3
- Video bit rate \leq 15 Mbit/s
- Resolution: 576i max
720x576 pixels interlaced
- Picture format 4:3 et 16:9

High definition

- MPEG2 MP@HL
- MPEG4 AVC HP@L4
- Video bit rate \leq 20 Mbit/s
- Resolution of broadcast: 720p, 1080i
- Upscale up to: up to 1080p50
- Content protection: HDCP on HDMI

Audio Decoding

- MPEG1 layer I, II
 - Dolby Digital
 - HE-AAC stereo / Multichannel
 - Dolby Digital/HE AAC to stereo down-mixing
 - Dolby Digital Plus to Dolby Digital transcoding
 - HE-AAC to Dolby Digital transcoding*
- * Feature subject to future product software upgrade

Convenience

- Automatic installation
- HD reception indicator
- Recording indicator
- Automatic channel update
- TV and Radio modes
- 4 x favorite TV channel lists
- 4 x favorite Radio channel lists

- Programme list editing: Add, Move, Delete
- Parental control – Child lock
- 8 days Electronic Programme Guide
- Event timer 8
- Event programming via EPG
- DVB subtitling
- Digital TXT / MHEG with Interaction channel
- Video scaling on HDMI output: Auto, Original, 576i, 576p, 720p, 1080i, 1080p50
- Dolby Digital 5.1 audio output
- ECO power management
- IP address assignment: Manual or DHCP
- Software update:
 - Update via OTA download
 - Local update via USB for consumer
- Switchable Powering for active antenna
- Watch and record
- Time shift buffer & trick modes
- Freeview +HD features (Series recording, alternate ...)

Application system resources

- Processor STi 7105

Reception - Demodulation

- Reception of DVB-T broadcast (EN 300744)
- Reception of DVB-T2 broadcast (acc. D-Book 6.1)
- Demodulation type: COFDM FFT
- Input frequency range: UHF IV / V
470 – 862 MHz
- Active RF Loop-through:
 - Bandwidth 47 - 862 MHz
 - Switch to passive loop-through in standby mode
- Channel bandwidth (BW) (target): 8 MHz
- Network: MFN / SFN

Rear panel connections

- RF in: type IEC 169-2 female
- RF out: type IEC 169-2 male
- HDMI output
- AUX SCART configurable by menu
 - SCART VCR configuration (for recorder)
 - Outputs: CVBS*, fixed level L/R audio
 - SCART TV configuration (for a TV)
 - Outputs: CVBS* or RGB/FB, fixed level L/R audio, Slow blanking
- L/R analogue Audio output
- Digital audio output:
 - Cinch electrical SPDIF
 - Optical SPDIF
- DC power inlet
- RJ45
- USB 2.0 (Master)

*Video standard: PAL

Hard Disk Drive

- Capacity 500 GB
- Recording time
 - In MPEG2 220 hours
 - In MPEG4 110 hours
- Data Scrambling AES
- Pairing HDD /STB
- Features
 - Trick modes 128 x to 1/8 x
 - Time shift buffer 3 hours
 - Smooth trick mode up to 4x

Antenna control for indoor aerial

- Via RF IN connector
- DC powering : 5 Volts / 50 mA
- Switchable via menu: On/Off

Front-panel display / buttons

- 1x bi-color LED & 1x blue LED
- 1x Red LED
- 16 digit white VFD display
- 5 x buttons: Standby, P+, P-, Res, V-Out
- 1 x USB (on product side)

10 Frequently asked questions

Accessories

- Remote control
Protocol: RC6
- Batteries: 2 x 1.5V type AAA/R03
- User manual
- QSG
- Freeview flyer
- Retune flyer
- Coaxial RF cable
- HDMI cable
- AC/DC converter incl. mains cord

Miscellaneous

- Temperature range (°C)
Operating +5 °C to +45 °C
Storage -25 °C to +70 °C
- Mains: AC 230 V +/- 10%, 50 Hz
- Power consumption: < 15 W
Standby: < 0.4 W
- Weight:
Product: 1.75 Kg
Including packaging: 2.7 Kg
- Dimensions:
Product (mm) 240 x 210 x 65
Packaging (mm) 360 x 290 x 100

Due to continued improvements, this information is subject to change without notice.

Connection

Your HD recorder does not display any digital TV channels on your TV. You may also see the on-screen message “Signal lost”.

- Check that the aerial cable from the aerial wall socket is correctly connected to your HD recorder (see page 11).
- There may be a temporary problem with the reception, caused, for example, by bad weather; try again later.
- Check if there is any network message related to this signal loss. You can access the **Network messages** menu from **Menu > Settings > Network messages**.

The time-shift bar with “Live” indication appears when you try to change a programme.

Repeat the programme change request to watch the programme.

Setup

Your HD recorder does not seem to be working and there are no lights on the front panel.

Check that the 12V power supply unit is correctly connected to your HD recorder.

Your HD recorder does not seem to be working and a channel number is shown on the front-panel display.

- Check that all connections are properly made (see page 11).
- Check that your TV is plugged into the mains and that it is switched on.
- Check that you have selected the correct A/V channel/source on your TV depending on how your HD recorder is connected to it (that is, using HDMI or SCART). Refer to your TV's user manual for instructions.

Your HD recorder seems to be switching off automatically after some time.

If your HD recorder automatically goes into standby mode (standby indicator on the front panel lights up), this is due to the Eco mode. The Eco mode is set to 3hours, by default (environmentally friendly product). To modify it, go to **Menu > Settings > Preferences > Automatic Eco mode**, and choose a different value. See page 30.

Your remote control is not working.

- Make sure that you point your remote control directly at your HD recorder and that nothing is between it and your HD recorder. The standby indicator on your HD recorder's front panel should flash each time you press a remote control button.
- Check the batteries and replace them, if necessary.

The picture is not displayed on your HDTV and an HDCP authentication error is displayed.

Your HDTV does not support HDCP, which allows your HD recorder to transmit full-resolution video to your HDTV. As a result, the HDMI output displays a message masking the video, which asks you for changing the resolution down to 576p (see page 23 - **Res** button).

The picture seems to be stretched or squashed.

Check the **TV format** setting under **Digital output** or **Analog output (Main > Settings > Preferences)**. Alternatively, press the **picture format** button (Ⓜ) on your remote control to scroll through the different settings. Also refer to your TV's user manual.

Your HD recorder displays 'err' on the front-panel display when you plug in a USB memory stick.

Reformat your USB memory stick using a computer. Ensure that the filesystem is FAT16 or FAT32.

You cannot find all the channels you think should be available.

Retune your HD recorder (see page 31). Alternatively, reset your HD recorder to its factory default settings (see page 32) and proceed with the first installation setup.

Note

During the first installation, your choice of the network may affect the number of installed channels.

You cannot find any HD channels.

Initially, HD programmes are available on channels 50 and 51. Switch to these channels. Note that the HD indicator on the front panel of your HD recorder lights up while watching an HD channel.

Digital terrestrial broadcasting is progressing in the UK. As digital switch over happens, the number of digital channels available in each region may also increase. Please visit one of the following websites to find out when the digital switch over is scheduled for your area:
www.digitaluk.co.uk
www.freeview.co.uk/availability (coverage checker for HD)

Your HD recorder seems to lock up or get stuck while retuning it to search for new channels.

In parts of the country where the analogue TV services have already been switched off, the time taken to retune can increase. This is because your HD recorder scans for all the transmitters in your area, which can take up to 15 minutes. Please wait for the retune to complete. This is not a fault.

You cannot find all the channels you think should be available even after retuning your HD recorder.

- The missing channels may not be available in your area. Check your coverage on the Freeview website: www.freeview.co.uk.
- Your antenna may need to be upgraded (signal power, position, orientation or cabling).
- A signal booster may be fitted on your antenna. Consider having this removed as amplifiers are normally not required after the digital switch over. Too high a signal level can cause your HD recorder to skip some channels.
- Some early digital receivers manufactured prior to 2004 support only the 2K mode of digital transmissions. As part of the digital switch over, the UK Freeview TV platform will be upgraded to a more robust transmission standard. The change in transmission standard has been authorised by OFCOM and the new standard is supported by products that have the “Digital Tick”.
- If you have a SKY box, switch it to standby mode and then retune the terrestrial receiver. If it then receives all expected Freeview channels, then the modulator needs adjusting on your Sky box. Contact Sky to find out how to adjust the modulator.

Your HD recorder found all the expected channels after you retuned it. However, when you turned on your HD recorder the next day, the picture was breaking up and some channels were missing.

Your HD recorder has an automatic retuning feature; this allows it to keep up to date with minor service changes. However, when the signal level of nearby relay transmitters are high or if the antenna signal is being amplified, these problems can occur.

To solve this problem:

- Turn off the automatic channel updates feature of your HD recorder (see page 32).

- Remove any signal amplifiers or boosters that are fitted on your antenna. These are not required after the digital switch over.
- Check that your antenna is aligned properly and is a model adapted for digital signal reception in your area. If you are not sure, please use the services of a recognised CAI antenna installation company.

You set a recording but your HD recorder did not record what you wanted.

Check the **TV guide** or the **Recordings** menu to see if an alternate instance of the programme was automatically selected due to a conflict.

Your hard disk is full with protected recordings.

Remove the protection on your recordings so that your HD recorder can automatically free up some disk space by erasing the recorded programmes.

Although you set Audio capabilities to “Auto” for HDMI or “Dolby Digital” for S/PDIF, your HD recorder does not deliver Dolby Digital 5.1 multi-channel audio output.

- Your HD recorder needs a software upgrade.
- Visit www.philips.com/support regularly to check if the appropriate software for upgrading your HD recorder via USB is available.
- Set the **Audio capabilities** setting to **PCM** until the upgrade of your HD recorder is done.

11 Glossary

A

Analogue audio

Analogue sound is output from the LEFT/RIGHT audio connectors on the rear panel of your HD recorder. The red and white sockets send audio through two channels, the left and right.

Aspect ratio

Aspect ratio refers to the length-to-height ratio of TV screens. The aspect ratio of a standard TV is 4:3, while the ratio of a high-definition or widescreen TV is 16:9. The letterbox format allows you to watch a video with a wider aspect ratio on a standard 4:3 TV.

D

DHCP

Dynamic Host Configuration Protocol (DHCP) is a network protocol that enables a router or server to automatically assign IP addresses to devices that are part of its network.

Digital audio

Digital sound is available when you use the **DIGITAL** audio connector (coaxial S/PDIF) on the rear panel of your HD recorder. These sockets send audio through multiple channels, instead of just two channels as analogue does.,

Dolby Digital

A surround sound system developed by Dolby Laboratories containing up to six channels of digital audio (front left and right, surround left and right, centre and subwoofer).

DVB

Digital Video Broadcasting

You get a picture or a freezed picture, a program number on the front display and your receiver seems blocked while not responding to the remote control commands.

Your HD recorder has hung up. You have to reset your HD recorder. Press the standby button on the front panel until **PHILIPS** is shown on the front-panel display.

If you have tried all of the actions suggested above and still are not able to resolve the problem, contact your local Philips Consumer Care Centre (see page 42).

E**EPG**

Electronic Programme Guide

EasyLink

The Philips EasyLink™ technology enables you to control multiple devices, which are connected through standard HDMI cables, using a single remote.

H**HDCP**

High-bandwidth Digital Content Protection (HDCP) is a type of digital copy protection system. When your HD recorder is attached via an HDMI cable to an HDCP-compliant HDTV, the HDTV and HD recorder negotiate a secure link, which allows your HD recorder to transmit full resolution video to your HDTV.

HDD

Hard Disk Drive

HDMI

High-Definition Multimedia Interface (HDMI) is a high-speed digital interface that can transmit uncompressed high-definition video and digital multi-channel audio. It delivers perfect picture and sound quality, completely free from noise. HDMI is fully backward compatible with DVI.

HDTV

High-Definition Television

L**Lip Synchronisation**

Setting used to synchronise audio with video in case a delay is experienced, in particular, if speech does not match lip movements.

M**MPEG**

Motion Picture Experts Group. A collection of compression systems for digital audio and video.

P**PIN Code**

A 4-digit code used to prevent access to inappropriate programmes (parental control).

S**SDTV**

Standard-Definition Television.

Surround

A system for creating three dimension sound fields full of realism by arranging multiple speakers around the listener.

U**USB memory stick**

A small size storage device, which is used to update your HD recorder's software (see page 32). Connect it to the **USB 2.0** connector on the rear panel of your HD recorder.

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Contact information



HDT 8520/05

Serial number:

UNITED KINGDOM

Phone: 0800 331 60 15

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